

ABSTRACT OF THE DISCLOSURE

An information reading apparatus can detect the coupling state of the input light to a waveguide of a laminated recording medium in a simple manner, so as to enable to focus the input light on a target recording layer to access the information recorded in the target recording layer quickly. The apparatus is compact and is economical to produce. The apparatus has a light source for injecting a light on an input edge of a lamination recording section, assembled into the recording medium containing a lamination of recording layers. Each recording layer has data represented by scattering centers which diffract an input light generated by a converging lens. An input light directing device directs the light source and the converging lens as a unit to focus the input light on a desired location. An image recording device records an informational image generated by guided waves produced within a laminated waveguide. An optical power detector detects output light emitted from an output edge of a specific recording layer as well as scattered light generated from recording layers other than the specific recording layer. An optical power discrimination circuit determines whether an optical power detected by the optical power detector is associated with the output light or the scattered light. Data recorded in any specific recording layer can be accessed quickly and simply by focusing input light on a core layer of a multi-layered hologram recording data storage medium. Because the absolute positional information stored in the storage medium is minimized, data storage capacity of the storage medium is almost unaffected while making the apparatus compact and low cost.